

**AMENDMENTS TO THE CLAIMS**

Claims 1-17. (canceled)

Claim 18. (New) A data processing apparatus for processing input data and outputting the processed data, comprising:

data processor configured to process the input data by a predetermined processing method and output the processed data as output data;

input-data evaluator configured to evaluate the input data and calculate a reliability of the input data;

output-data evaluator configured to evaluate the output data and calculate a reliability of the output data, and

real-time learning portion configured to control the data processing apparatus such that the processing method is learned in real time according to the reliability of the input data calculated by said input-data evaluator and the reliability of the output data calculated by said output-data evaluator, and said data processor processes the input data according to the learned processing method.

Claim 19. (New) A data processing apparatus according to Claim 18, further comprising an input-data storage unit for storing a predetermined number of time-sequentially input data.

Claim 20. (New) A data processing apparatus according to Claim 19, wherein said input-data evaluator calculates a dispersion of the predetermined number of the input data stored

by said input-data storage unit and evaluates current input data according to the dispersion.

Claim 21. (New) A data processing apparatus according to Claim 19, wherein said input-data evaluator calculates an average of the predetermined number of the input data stored by said input-data storage unit, and evaluates current input data according to an error of each input data against the average.

Claim 22. (New) A data processing apparatus according to Claim 19, wherein said input-data evaluator calculates a dispersion and an average of the predetermined number of the input data stored by said input-data storage unit; obtains an error of each input data against the average; and evaluates current input data according to the dispersion and the error.

Claim 23. (New) A data processing apparatus according to Claim 18, wherein said output-data evaluator evaluates current output data according to a sum of the evaluation of the input data and the evaluation of the output data.

Claim 24. (New) A data processing apparatus according to Claim 18, further comprising an output-data storage unit for storing the output data, wherein said data processor adds previous output data stored by said output-data storage unit and current input data to obtain the output data corresponding to the current input data.

Claim 25. (New) A data processing apparatus according to Claim 24, wherein said real-time learning portion learns a predetermined weight coefficient according to the evaluation

of the input data and the evaluation of the output data, and

said data processor obtains the output data corresponding to the current input data according to the weight coefficient.

Claim 26. (New) A data processing method for processing input data and outputting the processed data, comprising the steps of:

processing the input data by a predetermined processing method and outputting the processed data as output data;

evaluating the input data and calculating a reliability of the input data;

evaluating the output data and calculating a reliability of the output data, and

controlling such that the processing method is learned in real time according to the reliability of the input data calculated in the input-data evaluation step and the reliability of the output data calculated in the output-data evaluation step, and the input data is processed in the data processing step by the learned processing method.

Claim 27. (New) A data processing method according to Claim 26, further comprising the step of storing a predetermined number of time-sequentially input data.

Claim 28. (New) A data processing method according to claim 27, wherein, in the input-data evaluation step, a dispersion of the predetermined number of the input data stored in the input-data storage step is calculated and current input data is evaluated according to the dispersion.

Claim 29. (New) A data processing method according to Claim 27, wherein, in the input-data evaluation step, an average of the predetermined number of the input data stored in the input-data storage step is calculated, and current input data is evaluated according to an error of each input data against the average.

Claim 30. (New) A data processing method according to Claim 27, wherein, in the input-data evaluation step, a dispersion and an average of the predetermined number of the input data stored in the input-data storage step are calculated; an error of each input data against the average is obtained; and current input data is evaluated according to the dispersion and the error.

Claim 31. (New) A data processing method according to Claim 26, wherein, in the output-data evaluation step, current output data is evaluated according to a sum of the evaluation of the input data and the evaluation of the output data.

Claim 32. (New) A data processing method according to Claim 26, further comprising the step of storing the output data, wherein, in the data processing step, previous output data stored in the output-data storage step and current input data are added to obtain the output data corresponding to the current input data.

Claim 33. (New) A data processing method according to Claim 32, wherein a predetermined weight coefficient is learned according to the evaluation of the input data and the evaluation of the output data in the real-time learning step, and the output data corresponding to the current input data is obtained according to the weight

coefficient in the data processing step.

Claim 34. (New) A storage medium storing a computer-controllable program for processing input data and outputting the processed data, the program comprising the steps of:

- processing the input data by a predetermined processing method and outputting the processed data as output data;
- evaluating the input data and calculating a reliability of the input data;
- evaluating the output data and calculating a reliability of the output data, and
- controlling such that the processing method is learned in real time according to the reliability of the input data calculated in the input-data evaluation step and the reliability of the output data calculated in the output-data evaluation step, and the input data is processed in the data processing step by the learned processing method.